



What is claimed is:

1 A method for configuring a product, comprising the steps

2 of:

3 defining a configuration preference for a session in
4 which a user configures a product;

5 presenting a series of selection option sets to the user,
6 each set containing at least one item; and

7 for each set, accepting from the user a selection of an
8 item from the set, wherein selection of an item from each set
9 defines a configuration for the product;

10 wherein, each time a set of selections is presented to
11 the user, a default selection from the set is presented which
12 provides a best fit with the preference.

1 2. The method of claim 1, wherein each selection set
2 presented to the user is checked before presentation to
3 confirm that all items in the set are actually available.

1 3. The method of claim 1, wherein the step of presenting a
2 default selection includes defining a default selection which
3 provides a good fit with an optimization function in addition
4 to the best fit with the preference.

1 4. The method of claim 3, wherein the optimization function
2 maximizes manufacturer profit.

1 5. The method of claim 4, wherein the preference selects an
2 item having a low price.



1 9. The method of claim 7, wherein the preference is defined
2 in response to a product selection decision made by the user.

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10. A method for configuring a product, comprising the steps
of:

3 presenting a series of selection option sets to the user,
4 each set containing at least one item;

5 for at least one of the selection option sets,
6 identifying a default selection;

7 for each set, accepting a selection of an item from the
8 user;

9 for each set, before presenting the selection options to
10 the user, determining which of the items are actually
11 available and presenting only those items which are actually
12 available; and

13 for the at least one sets in which a default selection is
14 identified, selecting as the default an item which is actually
15 available and which provides a best result to a preselected
16 optimization function.

1 11. The method of claim 10, further comprising the steps of:

2 before any selection sets are presented to the user,
3 defining configuration information to provide a series of
4 selection sets to be presented to configure the product; and

5 within the determining step, determining which of the
6 items in the defined configuration information are actually
7 available.

1 12. The method of claim 11, further comprising the steps of:



as selections are made by the user, adding constraints to
later presented selection sets; and

within the determining step, determining which of the
items in the defined configuration information, and which meet
constraints added by user selections, are actually available.

13. The method of claim 10, wherein the optimization function
is selected during a session with the user in which the
product configuration is performed.

14. The method of claim 13, wherein the optimization function
is selected as a function of an identity of the user.

15. The method of claim 13, wherein the optimization function
is selected by the user.

16. The method of claim 10, wherein the default item is
selected which provides a best result to a second optimization
function and the first optimization function.

17. The method of claim 10, wherein the preselected
optimization function is a function which minimizes price to
the user.

18. The method of claim 10, wherein the preselected
optimization function is a function which maximizes profit to
a manufacturer.

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- 1 19. The method of claim 10, wherein the preselected
- 2 optimization function is a function which minimizes time to
- 3 delivery of the product.

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A system for configuring products, comprising:

2 a user interface for displaying lists of items to a user
3 and accepting selections from the user, wherein for at least
4 one list a default item is indicated to the user;

5 an engine which stores information indicating product
6 availability, wherein the engine provides lists of items to
7 the user interface for display, and wherein the engine
8 determines the default item by applying an optimization
9 function to the product availability information.

1 21. The system of claim 20, wherein the engine comprises:

2 a configuration engine connected to the user interface,
3 wherein the configuration engine determines sets of items to
4 be displayed in lists to the user in response to selections
5 made by the user; and

6 an available to promise engine connected to the
7 configuration engine, wherein the available to promise engine
8 contains information regarding availability of the items
9 determined by the configuration engine, and further contains
10 information for each item used in applying the optimization
11 function to the available items, and wherein the available to
12 promise engine returns to the configuration engine a list of
13 items which are actually available.

1 22. The system of claim 21, wherein the configuration engine
2 applies the optimization function to the actually available
3 items returned from the available to promise engine.



1 2. The system of claim 21, wherein the available to promise
2 engine applies the optimization function to the items which
3 are actually available before returning the list to the
4 configuration engine, and identifies the default item when the
5 list is returned.

1 24. The system of claim 21, wherein, for each list of items
2 to be displayed to the user, the configuration engine passes
3 to the available to promise engine a list of proper
4 configuration items, and wherein, for each list of proper
5 configuration items, the available to promise engine
6 determines which items are actually available, applies the
7 optimization function to each available item, and returns to
8 the configuration engine a list of available items and an
9 identification of which item best matches the optimization
10 function.

1 25. The system of claim 20, wherein the optimization function
2 comprises a function for minimizing product price.

1 26. The system of claim 20, wherein the optimization function
2 comprises a function for maximizing profits.

1 27. The system of claim 20, wherein the optimization function
2 comprises a function for minimizing delay until the product is
3 available.

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